

METHOD AND SYSTEM FOR FAILURE ACCOMMODATION  
OF GAS GENERATOR FUEL METERING SYSTEM

ABSTRACT OF THE DISCLOSURE

An apparatus for providing a backup fuel metering system for the  
5 gas generator section (24) of a gas turbine engine (10) is disclosed that  
includes a gas generator (24) and an augmentor (40). The apparatus  
includes a gas generator fuel metering system (52) providing fuel to the  
gas generator nozzles (32) and an augmentor fuel metering system (54)  
providing fuel to an augmentor (40). The augmentor fuel system (54)  
10 includes a diverter valve (88) which selectably directs fuel to the  
augmentor (40) during augmentation operation or to the gas generator  
nozzles (32) during a gas generator metering system failure or critical  
engine operation. The system allows the gas generator nozzles (32) to be  
supplied with fuel flow from the gas generator metering system (52), the  
15 augmentor metering (54) system or both. When the gas generator  
nozzles (32) are being supplied with flow from both metering systems the  
system is capable of improved fault accommodation.